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Preface

The papers in this volume were presented at the 23rd International Symposium on Algorithms and Computation (ISAAC 2012), held at National Taiwan University, Taipei, Taiwan, on December 19–21, 2012. In the past, ISAAC was held in Tokyo (1990), Taipei (1991), Nagoya (1992), Hong Kong (1993), Beijing (1994), Cairns (1995), Osaka (1996), Singapore (1997), Taejeon (1998), Chennai (1999), Taipei (2000), Christchurch (2001), Vancouver (2002), Kyoto (2003), Hong Kong (2004), Hainan (2005), Kolkata (2006), Sendai (2007), Gold Coast (2008), Hawaii (2009), Jeju (2010), and Yokohama (2011).

The mission of the ISAAC series is to provide a top-notch forum for researchers working in algorithms and theory of computation. Papers presenting original research in all areas of algorithms and theory of computation are sought. In response to the call-for-papers, ISAAC 2012 received 174 submissions from 33 countries. The Program Committee selected 68 papers for oral presentation. “Algorithmica,” “Theoretical Computer Science,” and the “International Journal of Computational Geometry and Applications” will publish a special issue dedicated to selected papers from ISAAC 2012.

The best student paper awards were presented to Nanao Kita for her paper “A Partially Ordered Structure and a Generalization of the Canonical Partition for General Graphs with Perfect Matchings” and to Norie Fu for her paper “A Strongly Polynomial-Time Algorithm for the Shortest Path Problem on Coherent Planar Periodic Graphs.”

We thank the invited speakers, John E. Hopcroft from Cornell University, USA, Timothy M. Chan from the University of Waterloo, Canada, and Erik D. Demaine from MIT, USA, for their distinguished lectures.

We thank all Program Committee members and external reviewers for their excellent work in the review process. We thank the Organizing Committee, chaired by Hung-Lung Wang, and conference volunteers for their extraordinary engagement in the conference preparation. We also thank the Advisory Committee, chaired by Takeshi Tokuyama, for their valuable guidance. Finally, we thank our sponsoring institutions for their support.

December 2012

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